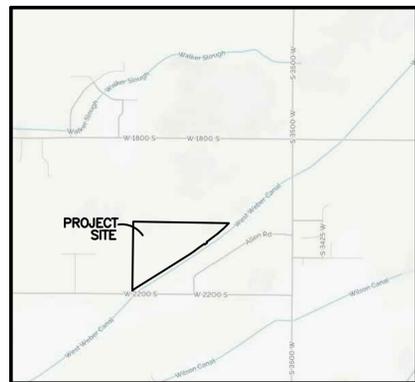


The names, widths, lengths, bearings and curve data on centerlines of proposed easements. WCO 106-1-5(a)(7); WCO 106-1-8(c)(1)e.

The lines, dimensions, bearings, areas, and numbers of all parts reserved for any reason within the subdivision. WCO 106-1-5(a)(7); WCO 106-1-8(c)(1)e.

FOUND BRASS CAP MONUMENT AT THE NORTHEAST CORNER OF SECTION 28, TOWNSHIP 6 NORTH, RANGE 2 WEST, SLB&M. (DATED 1963)



Vicinity Map

SCALE: NONE

MONUMENTS

STREET NAMES

The existing location, widths, and other dimensions of all existing or platted easements within and immediately adjacent (within 30') to the tract to be subdivided. WCO 106-1-5(a)(6)

OVERALL AREA

Line Table

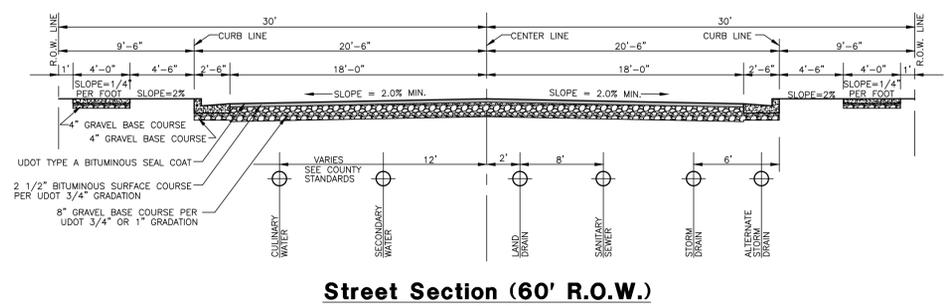
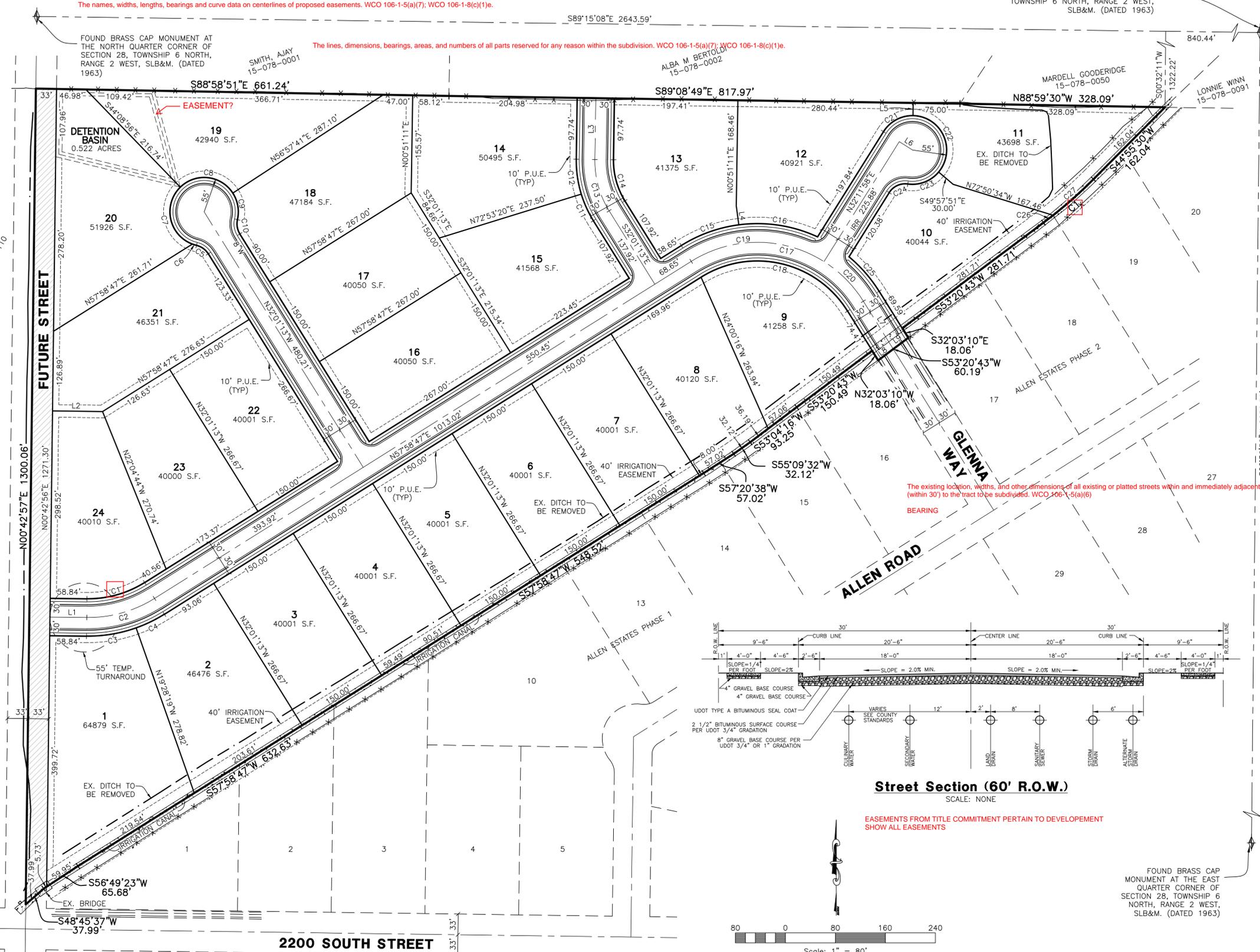
LINE	BEARING	DISTANCE
L1	S89°17'03"E	58.84
L2	N89°17'04"W	80.00
L3	S00°51'11"W	97.74
L4	N07°25'54"W	30.00
L5	N00°51'11"E	20.00
L6	S57°48'02"E	25.00
L7	N32°03'10"W	90.08
L8	N53°20'43"E	30.10
L9	N53°20'43"E	30.09

Curve Table

#	RADIUS	ARC LENGTH	CHD LENGTH	TANGENT	CHD BEARING	DELTA
C1	170.00'	97.13'	95.81'	49.93'	S74°20'52"W	32°44'10"
C2	200.00'	114.27'	112.72'	58.74'	N74°20'52"E	32°44'10"
C3	230.00'	81.04'	80.62'	40.94'	N80°37'19"E	20°11'17"
C4	230.00'	50.37'	50.27'	25.29'	S64°15'14"W	12°32'54"
C5	30.00'	23.81'	23.01'	12.46'	S54°34'11"E	45°05'57"
C6	55.00'	7.22'	7.22'	3.62'	S73°21'24"E	7°31'32"
C7	55.00'	110.82'	93.00'	87.08'	S11°52'17"E	115°26'42"
C8	55.00'	97.06'	84.95'	66.85'	N83°35'38"W	101°06'37"
C9	55.00'	44.27'	43.08'	23.41'	N09°58'48"W	46°07'03"
C10	30.00'	23.61'	23.01'	12.46'	N09°28'15"W	45°05'57"
C11	180.00'	46.84'	46.71'	23.55'	S24°33'57"E	14°54'33"
C12	180.00'	56.44'	56.21'	28.45'	S08°07'45"E	17°57'51"
C13	150.00'	86.06'	84.89'	44.25'	S15°35'01"E	32°52'24"
C14	120.00'	68.85'	67.91'	35.40'	S15°35'01"E	32°52'24"
C15	230.00'	98.50'	97.75'	50.02'	N70°14'56"E	24°32'19"
C16	230.00'	129.20'	127.51'	66.36'	S81°23'19"E	32°11'11"
C17	200.00'	314.05'	282.76'	199.89'	N77°02'12"W	89°58'03"
C18	170.00'	266.94'	240.35'	169.90'	N77°02'12"W	89°58'03"
C19	200.00'	224.17'	212.62'	125.51'	S89°54'38"E	64°13'11"
C20	200.00'	89.88'	89.12'	45.71'	S44°55'36"E	25°44'52"
C21	55.00'	56.30'	53.88'	30.90'	S61°31'34"W	58°39'13"
C22	55.00'	124.01'	99.36'	115.78'	N24°33'20"W	129°10'58"
C23	55.00'	55.53'	53.20'	30.39'	N68°57'35"E	57°50'53"
C24	30.00'	34.39'	32.54'	19.36'	N65°02'29"E	65°41'03"
C25	230.00'	73.27'	72.96'	36.95'	S41°10'46"E	18°15'11"
C26	719.98'	19.28'	19.28'	9.64'	S52°34'41"W	1°32'04"
C27	719.98'	86.53'	86.47'	43.32'	S48°22'04"W	6°53'09"

Legend

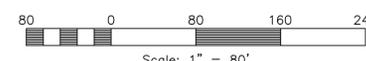
- = SECTION CORNER
- = BOUNDARY LINE
- = LOT LINE
- = ADJOINING PROPERTY
- = EASEMENTS
- = SECTION TIE LINE
- = EXISTING FENCE LINE
- = DITCH
- = P.U.E. = PUBLIC UTILITY EASEMENT
- = ROAD DEDICATION FOR FUTURE ROAD



Street Section (60' R.O.W.)

SCALE: NONE

EASEMENTS FROM TITLE COMMITMENT PERTAIN TO DEVELOPMENT SHOW ALL EASEMENTS



A measurable mathematical relationship between the property and the monument from which it is described. WCO 106-1-5(a)(4); WCO 106-1-8(c)(1)d.

DESCRIPTION

Developer:

Ivory Homes
970 Woodoak LN.
Salt Lake City, UT. 84117
(801) 386-6708

Reeve & Associates, Inc.

 5160 SOUTH 1500 WEST RIVERDALE, UTAH 84405
 TEL: (801) 621-3100 FAX: (801) 621-2666 WWW.REEVE-ASSOCIATES.COM
 LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
 TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS	DESCRIPTION	DATE

Saddlebred Acres
 PART OF THE NE 1/4 OF SECTION 28, T.4N., R. 1W., S.L.B. & M., U.S. SURVEY
 WEBER COUNTY, UTAH
Preliminary Plan

Project Info.
 Engineer: G. Thorson
 Designer: C. Cave
 Begin Date: JUNE 23, 2016
 Name: SADDLEBREDD ACRES
 Number: 4948-06

Sheet	2
1	Sheets

Storm Runoff Calculations

Allen Property - Ivory Homes
Taylor, UT
7/6/2016 T.H.

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Taylor, UT area taken from data compiled using NOAA Atlas 14 for a 50-year storm event.

Runoff storm water has been calculated for two different sets of conditions, one being undeveloped land and the other with land fully improved. The difference between the two quantities will be detained in a subsurface detention basin where the storm water will be released at its historical rate of 0.2 cfs/acre.

The calculations are as follows:

1. Drainage Area:

Runoff Coefficients		
Paved Area	182,344	C = 0.95
Landscaped Area	967,905	C = 0.20
Roof	96,600	C = 0.95
Weighted Runoff Coefficient		C = 0.37

2. Time of Concentration:

Using Storm Water Run-Off "Overland Flow Time"

Tc = 30 minutes

3. Rainfall Intensities:
Rainfall Intensities were obtained using NOAA Atlas 14 for a 50-year storm event. This can be seen in section 5 below.

Rainfall Intensity for a 15 minute Time of Concentration = 2.25 in/hr

4. Peak Run-off:

Runoff Coefficient	C = 0.37
Rainfall Intensity	i = 2.25 IN./HR.
Acres	A = 28.62 ACRES
Runoff Quantity	Q = CIA
Q (total)	Q = 23.69 cfs

5. Allowable Discharge:
Allowable Discharge of Storm Water Volume (pre-development) is 0.2 cfs per acre.
Allowable Discharge Q = (0.2 x acres)

Allowable Discharge = Q = 5.72 cfs

6. Volume of Run-off for 50-year 24 hour Storm Event:

C =	0.37
A =	28.62
Q(out) =	5.72 (based on 0.2 cfs/acre)

time (min)	time (sec)	i (in./hr.)	Q (cfs)	Vol. in (cf)	Vol. out (cf)	Difference (cf)
0	0	0.00	0.00	0.00	0.00	0.00
5	300	5.32	56.01	16801.89	1717.42	15084.46
10	600	4.04	42.53	25518.65	3434.85	22083.81
15	900	3.34	35.16	31645.66	5152.27	26493.39
30	1800	2.25	23.69	42636.37	10304.54	32331.83
60	3600	1.39	14.63	52679.60	20609.07	32070.52
120	7200	0.77	8.11	58364.45	41218.15	17146.30
180	10800	0.53	5.57	60145.70	61827.22	-1681.52
360	21600	0.31	3.26	70492.12	123654.45	-53162.32
720	43200	0.19	2.01	86864.49	247308.89	-160444.40
1440	86400	0.11	1.15	99143.76	494617.79	-395474.02

Required Detention Volume = 32331.83 c.f.

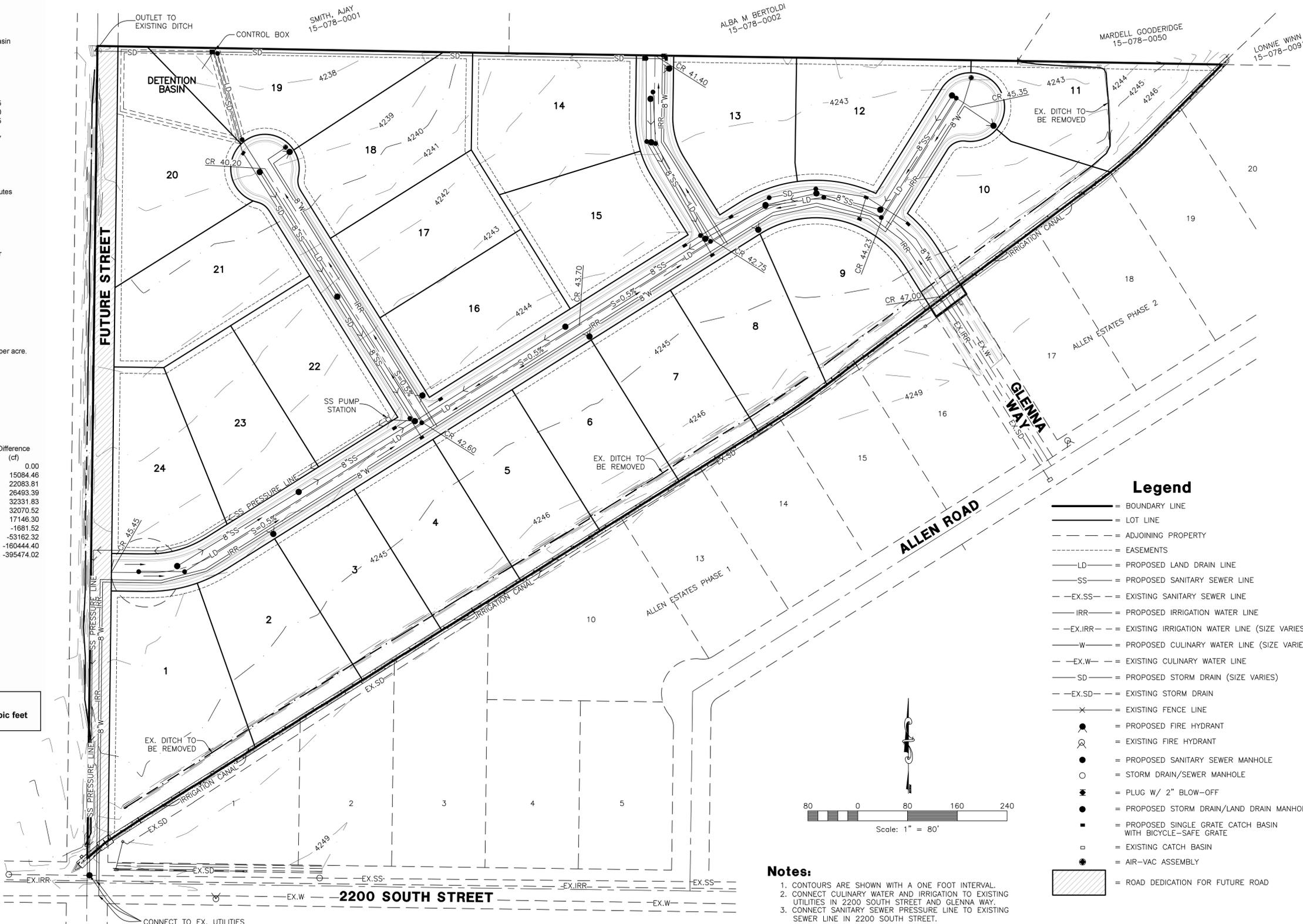
7. Orifice Sizing

Given:

Q =	5.72	cfs
Zg =	64.4	ft/s ²
H =	2.50	ft
Cd =	0.62	
R =	SQRT(Q/(0.7*(64.4*H)^0.5/π))	
R =	0.48	feet
	5.78	inches
D =	11.55	inches

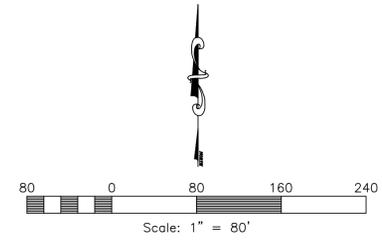
SUMMARY:

The required volume of the detention basin is **32,332 cubic feet**
Orifice Diameter at outlet is **11.55 inches**



Legend

- = BOUNDARY LINE
- = LOT LINE
- - - = ADJOINING PROPERTY
- - - = EASEMENTS
- LD = PROPOSED LAND DRAIN LINE
- SS = PROPOSED SANITARY SEWER LINE
- - - EX. SS = EXISTING SANITARY SEWER LINE
- IRR = PROPOSED IRRIGATION WATER LINE
- - - EX. IRR = EXISTING IRRIGATION WATER LINE (SIZE VARIES)
- W = PROPOSED CULINARY WATER LINE (SIZE VARIES)
- - - EX. W = EXISTING CULINARY WATER LINE
- SD = PROPOSED STORM DRAIN (SIZE VARIES)
- - - EX. SD = EXISTING STORM DRAIN
- X = EXISTING FENCE LINE
- = PROPOSED FIRE HYDRANT
- = EXISTING FIRE HYDRANT
- = PROPOSED SANITARY SEWER MANHOLE
- = STORM DRAIN/SEWER MANHOLE
- = PLUG W/ 2" BLOW-OFF
- = PROPOSED STORM DRAIN/LAND DRAIN MANHOLE
- = PROPOSED SINGLE GRATE CATCH BASIN WITH BICYCLE-SAFE GRATE
- = EXISTING CATCH BASIN
- = AIR-VAC ASSEMBLY
- ▨ = ROAD DEDICATION FOR FUTURE ROAD



- Notes:**
1. CONTOURS ARE SHOWN WITH A ONE FOOT INTERVAL.
 2. CONNECT CULINARY WATER AND IRRIGATION TO EXISTING UTILITIES IN 2200 SOUTH STREET AND GLENNA WAY.
 3. CONNECT SANITARY SEWER PRESSURE LINE TO EXISTING SEWER LINE IN 2200 SOUTH STREET.

Saddlebred Acres

Weber County, Utah

Reeve & Associates, Inc.
5160 S. 1500 W., RIVERDALE, UTAH 84405
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REVISIONS	DESCRIPTION
DATE	

Saddlebred Acres
PART OF THE NE 1/4 OF SECTION 28, T.4N., R. 1W., S.1B & M., U.S. SURVEY
WEBER COUNTY, UTAH

Preliminary Utilities Plan

Project Info.
Engineer: G. Thorson
Designer: C. Cave
Begin Date: JUNE 23, 2016
Name: SADDLEBREDED ACRES
Number: 4948-06

Sheet	2
2	Sheets